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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,499	10/23/2001	Assaf Zeira	P-181-3 US	3946

7590

12/02/2004

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EXAMINER

TRAN, DENISE

ART UNIT PAPER NUMBER

2186

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/047,499

Applicant(s)

ZEIRA ET AL.

Examiner

Denise Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 and 11 is/are allowed.
- 6) ☒ Claim(s) 1, 5-8 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 11/26/04.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. The applicant's amendment filed 9/7/04 has been considered. Claims 1, 5-8, and 10-17 are presented for examination. Claims 2-4 and 9 have been deleted.
2. The indicated allowability of claims 1, 5, and 7 is withdrawn in view of the newly discovered reference(s) to Brady. Rejections based on the newly cited reference(s) follow.
3. Claims 10-17 are allowable over the prior art of record.
4. Claims 6 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 6, 8, and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 6, lines 9-10, 14, and 19-20, it is unclear whether "said CPU" preferred to a CPU of said at least two CPUs (claim 5) or "a CPU" (claim 6, line 2);

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As per claim 8, lines 28 and 34-35, it is unclear whether "said CPU" preferred to a CPU of said at least two CPUs (claim 5) or "a CPU" (claim 8, line 2) or "a CPU within said CPU group" (claim 8, line 23). Claims 12, 14, and 16 have similar problems as discussed above.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady, U.S. Patent No. 5,613,139.

As per claim 5, Brady teaches a computer system comprising:

at least two CPUs (e.g., figs.1-2, els. 12 of NO-N1);

a shared memory shared by said CPUs (e.g., fig. 2, el. 23 of N2), at least one shared system resource accessible to said CPUs (e.g., col. 3, lines 55-60); and

said shared memory having therein a resource locking table (e.g., fig. 2, el. 32), comprising memory elements, each of said memory elements designated for being written to by only one of said at least two CPUs (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 20-21), and each CPU having a corresponding memory element for each shared system resource to which it has access (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), wherein each of said at least two CPUs is communicatively

interconnected with said shared memory and said shared system resource, and said resource locking table is operative by each of said CPUs (e.g., figs. 1-2, els. No-N2, 10; 24; and col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), and

wherein any of said at least two CPU can read a first collection of memory elements in a single transaction (e.g., col. 4, lines 45-65), said first collection of memory elements corresponding to requests of said CPUs for one of said at least one shared system resource (col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25)

As per claim 1, Brady teaches a computer system comprising:  
at least two CPUs (e.g., figs.1-2, els. 12 of NO-N1);  
a shared memory shared by said CPUs (e.g., fig. 2, el. 23 of N2), and  
at least one shared system resource accessible to said CPUs (e.g., col. 3, lines 55-60),

said shared memory having therein a resource locking table (e.g., fig. 2, el. 32), comprising memory elements, each of said memory elements designated for being written to by only one of said at least two CPUs (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 20-21), and each CPU having a corresponding memory element for each shared system resource to which it has access (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25),

wherein each of said at least two CPUs is communicatively interconnected with said shared memory and said shared system resource, and said resource locking table

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is operative by each of said CPUs (e.g., figs. 1-2, els. No-N2, 10; 24; and col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), and

wherein said communicative interconnection is across a communications bus (e.g., fig 1-2, els. 10, 14) wherein a single read operation (i.e., a read and store lock message) is capable of atomically reading at least a collection of said memory elements, said collection comprising at least two memory elements (col. 4, lines 58- to col. 5, line 4; col. 5, lines 45-46; and col. 6, lines 15-25).

As per claim 7, Brady shows a second collection of memory elements corresponds to a group of CPUs (e.g., fig. 4, el. 32, lock words 46 correspond to group requesting nodes or CPUs; col. 4, lines 58- to col. 5, line 4; col. 5, lines 45-46; and col. 6, lines 15-25).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise Tran whose telephone number is (571) 272-4189. The examiner can normally be reached on Monday, Thursday, and Friday from 8:45 a.m. to 5:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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11/26/04